to the Société Zoologique de France, in 1881, he very justly ascribing to Tournefort "la gloire d'avoir fondé la nomenclature binaire," which for so many years has been wrongfully assigned to Linnæus, the latter merely formulating the rules in a more precise and general manner than had been done by any of his predecessors. While he, in his rules, insisted upon the strict observance of the rule of propriety, he, "sans autre motif que de satisfaire à sa vanité" rejected genera and species firmly established by his predecessors, who were often far better zoölogists than was Linnæus.

Dr. Blanchard regretfully considers the use of trinomials, and even quadrinomials, admissible (see pp. 94-96, and 150) in special cases,* as in descriptive works where it is necessary to distinguish diverse forms belonging to the same species. Indeed, he believes the adoption of the system inevitable, its use is already so extended.

In respect to the emendation of names, Dr. Blanchard's ruling is radically opposed to that favored by the A. O. U. 'Code.' He says: "Article XIV. Tout barbarisme, tout mot formé en violation des règles de l'orthographe, de la grammaire et de la composition devra ête rectifié" (p. 147). Again he says (p. 157), all such words should be rejected ("rejeté"). Dr. Blanchard and our 'Code,' which says the "original orthography of a name is to be rigidly preserved, unless a typographical error is evident,' thus represent the two extremes of this question. We still believe the ruling of the A. O. U. Committee on this point is sound in principle, but yet susceptible of a slight modification in the interest of uniformity in respect to genitive terminations, and in the transliteration of Greek vowels.—J. A. A.

Ridgway's Ornithology of Illinois.†—From Prof. Forbes' 'General Introduction' we quote: 'This volume is the first to appear of a series on the zoölogy and cryptogramic botany of the State of Illinois, authorized and provided for by the Thirty-fourth General Assembly.‡

"The series is intended to summarize the facts relating to the natural history of Illinois which have been accumulated by general investigations made in the districts of which the State forms a part, by the studies of local naturalists, and by the operations of the State Laboratory of Natural History.... In the preparation of the volumes of the report it will be our main final object to furnish the materials for a full and accurate picture of the native plant and animal life of Illinois as it actually exists in our fields, woods, and waters, and to bring most prominently into view those parts of the subject which have a peculiar educational or economic value....

"The volume here presented is due to the generous and disinterested

^{* &}quot;Dans les cas spéciaux où il est utile de distinguer des variétés, l'adjonction d'un troisième nom à ceux du genre et de l'espèce est permise " (p. 150).

[†] Natural History Survey of Illinois, | State Laboratory of Natural History, | S. A. Forbes, Director. | — | The | Ornithology | of Illinois. | — | Part I, Descriptive Catalogue, | By Robert Ridgway. | Part II, Economic Ornithology, | By S. A. Forbes. | — | Volume I. | — Published by Authority of the State Legislature. | — | Springfield, Ill.: | H. W. Rokker, Printer and Binder. | 1889, Roy. 8vo. pp. i-viii, 1-520, colored frontispiece, plates, i-xxxii.

t "Laws of the State of Illinois, 1885, p. 23, sec. 3."

labors of Dr. Robert Ridgway, formerly of Mt. Carmel, Illinois,—an ornithologist whose long and eminent service in the Smithsonian Institution and the United States National Museum seems only to have intensified his interest in the promotion of the study of his favorite science in his native State....

"The long delay in the publication of Volume I has been due partly to the pressure of other duties and to lack of office assistance, but chiefly to the destruction by fire in the printing office in February, 1889, of an entire edition of the volume and of the plates and cuts from which it was printed.

"To the characteristic generosity of the honored and lamented Dr. Spencer F. Baird, we owe the illustrations of this volume, with the exception of the frontispiece,—all being printed from copies of cuts loaned to the Laboratory by the Smithsonian Institution."

In the preface which follows, the author speaks of the conditions under which his task was performed, and of the material on which it is based, making here full acknowledgment for the permission to use the specimens contained in the National Museum, and in the private cabinets of various students residing in the State, who have also placed at his disposal the results of their observations.

"On account of the limited time allotted" for the completion of the work (one year) the author has "found it necessary to draw to a certain extent upon previous publication," but we do not observe that he has more than properly availed himself of this privilege, the quoted technical portions being mainly restricted to generic, subgeneric or specific diagnoses from the History of N. A. Birds, and descriptions of first plumages from Mr. Brewster's well-known paper, which in each case are accredited to their source.

The work now opens with an introduction of 36 pages, which is divided into two parts, concludes with a bibliography, and is a model for future faunal works of this nature. 'Part I, the Physical Features of the State' is subdivided into four sections which under the headings of 'General,' 'The Lake Shore District (by E. W. Nelson),' 'The Prairies,' 'The 'Southern Bottom Lands,' and 'Climate,' treat of the State from physiographical, floral, faunal, and climatal standpoint. 'Part II, Characteristic Features of the Avifauna of the State,' presents a series of analytical table which divide the birds recorded from the State as follows: 'A. Species which have been observed in Winter over the greater portion of the State, many of them regular Winter residents,' or. 'B. Species which have been observed in Winter only in the Southern portion of the State (latitude of Mount Carmel, or further South)' 63. 'C. Species occurring in Winter in the Northern portion of the State, but not yet-observed as far South as Mount Carmel, '31. 'D. Summer residents of General Distribution,' 148. 'E. Summer residents confined mainly, so far as known, during that season to the Northern portion of the State,' 44. 'F. Summer residents which, so far as known, are confined mainly to the Southern portion of the State,' 13. 'G. Summer visitants to the Southern portion of the State, but not ascertained to breed within our limits,' 10. 'H. Irregular or casual visitants from the Western Province,'

14. 'I. Regular residents or visitants which intrude from the Westward,' 11, of which 4 are "observed only in summer," 3 "only in winter or during migration," and 4 "irrespective of season." 'J. Stragglers and doubtful species, the former including those of which not more than one specimen has been taken or observed,' 14. 'K. Species formerly occurring, but possibly not now to be found in the State,' 5.

The second section of this part treats of the State's "position with regard to Faunal Provinces or Districts." Illinois is considered to lie far within the Eastern, or Atlantic, Province, and were it not for the prairies the fauna would probably not possess the slightest tincturing of western forms." This last is no doubt very true, but we fail to see why the effect should not be recognized when the cause is so evident. In the same manner we might say that without the southern bottom-lands, which the author further mentions, certain species from the southern portions of the State would not exhibit an approach toward Florida or Gulf Coast forms, which the author states is observable. It seems to us that this eastern extension of the prairies, bringing with it as regular visitants such prairie-loving species as Chondestes grammacus, Ammodramus lecontei, Spizella pallida, Sturnella magna neglecta, etc., marks an eastern extension of the Campestrian Sub-province which the author characterizes on page 246. The State is further considered to be "wholly embraced within the 'Carolinian Fauna,'" although the author's table 'E' includes among its 44 summer residents of the northern portions of the State at least 40 species which are not generally considered to characterize this fauna. With regard to what the author designates "so-called geographical variation," "Illinois likewise belongs strictly to the Eastern or Atlantic Province, none of the resident or summer resident species showing any tendency toward the representative forms which belong to the Western Province, except very rarely or sporadically, and apparently not more frequently than along the Atlantic coast itself," the single exception "being the case of Geothlypis trichas, the Illinois form of which seems to be the western race, G. trichas occidentalis Brewst., which apparently replaces true G. trichas everywhere west of the Alleghanies," a statement with which, in this particular case, we cannot agree. Section three of Part II relates to migration, and presents tables, chronologically arranged, showing the times of arrival and departure of transient species, and also the dates of flowering of certain plants and trees. The observations of Messrs, Henshaw and Palmer at Washington, and of Mr. Otto Widmann at St. Louis are here included for comparison with similar observations made by the author at Mount Carmel, Illinois, and Wheatland, Indiana.

This excellent introduction, containing more valuable information than is usually compassed by an entire volume of this nature, concludes with a bibliography which, from 1853 to 1885, enumerates the titles of 44 publications factually consulted" by the author.

The remaining 457 pages are devoted to brief biographies, and the systematic treatment of the 216 land birds included in this volume. The nomenclature of the A. O. U. Check-List is adopted, but the order therein

followed is reversed and altered, the first species mentioned being Turdus mustelinus, the last, Zenaidura macroura. The author's vast experience in descriptive work permits him to handle his subject in a masterly manner; there are analyses to the higher groups, families, and genera, and keys to the last which define all the then recognized species and subspecies of Eastern North American birds belonging to them. This is new matter; the generic, subgeneric, and specific diagnoses and descriptions, as before stated, are frequently quoted, but they are taken from a worthy source, and the birds have not to our knowledge changed perceptibly since they were written, though, it is true, we do now see many things in the light of a new understanding, which were then obscure. We would not then, for instance, have considered Sturnella magna neglecta a species, in fact its recognition as a race was open to question, but we find on page 314, it is accorded full specific rank. Nor would we then have admitted the author's earlier view, to which he now returns, concerning the specific distinctness of Quiscalus quiscula æneus. It is true these views are not yet accepted; but there is evidently a tendency in this direction. It will be quite useless here to go further into this portion of the work; the author's name is a sufficient guarantee of its value and accuracy, and we hope the edition will permit its being placed in the hands of every student of North American ornithology, if not in the hands of every student of ornithology whatever be the country to which he devotes himself, for the model here presented is in every respect worthy his attention. It is a reviewer's duty to speak with equal candor of both the good and bad sides of the book before him, but we must confess this volume is possessed of a one-sidedness which renders it barren ground for the most fault-finding critic; the typographical errors are for the greater part unimportant and evidently beyond the author's control, and when we consider the limited time allowed him for the completion of his task, which was further curtailed by the official duties of a busy life, we can only admire the energy and ability which has enabled him to accomplish it so quickly and so well. - F. M. C.

Menzbier's Ornithology of Turkestan.*—The first part of Menzbier's great work on the ornithology of Turkestan, recently received, contains four colored plates and over one hundred pages of text, besides the long preface explanatory of the origin and scope of the work. The author has set before himself the serious task of treating monographically all the species of Turkestan, and the lands adjacent,—a region extending from the Lower Volga to Mongolia, and from southwest Siberia to Pamir. The work is based primarily on the immense collections and notes gathered by the late Dr. N. A. Sewertzow during his twenty-one years' exploration of this region under the auspices of the Russian Government. Dr. Sewertzow unfortunately died at the beginning of his work on his ornithological collections, leaving it to be carried forward by his devoted friend,

^{*}Ornithologie du Turkestan et des Pays adjacents. Par M. le Docteur M. A. Menzbier. Premier livraison. Avec un Atlas de 4 Planches. Moscow, 1888, 4to, pp. viil+